REMARKS

Claims 1, 3-8, 10-15, 17-24, and 26-35 are pending in the application, of which claims 1, 15, 23, and 24 are independent. Favorable reconsideration and further examination are respectfully requested.

Claims 12, 15, 22, and 24 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for having insufficient antecedent basis. Applicant has amended claims 12, 15, 22, and 24 to recite proper antecedent basis.

Turning to the art rejections, claims 1, 3-8, 15, 17-21, 23-24, 26-30, and 33 were rejected under 35 U.S.C. 102(b) as being anticipated by *Kalkunte et al.* (5,859,980). Claims 10 and 31 were rejected under 35 U.S.C. 103(a) as rendered obvious by *Kalkunte et al.* (5,859,980) in view of *Dixon et al.* (4,344,132). Claims 11 and 32 were rejected under 35 U.S.C. 103(a) as rendered obvious by *Kalkunte et al.* (5,859,980), in view of *Dixon et al.*, and further in view of *Haumont et al.* (US 2004/0071086). Claims 13 and 14 were rejected under 35 U.S.C. 103(a) as rendered obvious by *Kalkunte et al.* (5,859,980). Claims 14, 22, and 35 were rejected under 35 U.S.C.103(a) as rendered obvious by *Kalkunte et al.*, in view of *Kuo et al.* (US 6,105,079).

The Applicant has amended claim 1 to recite "wherein determining comprises adjusting the relay threshold from a first value that minimizes a probability of under-run during relay of the message to a second value that allows a selected amount of under-run to occur during relay of the message."

In general, receiving networks fall into three classes: "intolerant networks" which are particularly intolerant of under-runs, even at the expense of latency; "tolerant networks," which tolerate under-runs, but put a premium on latency; and all networks between these extremes.

Applicant's specification, on pages 11-12, describes adjusting the relay-threshold to reflect an extent to which the receiving network will tolerate an under-run of data in the FIFO-memory during a relay operation. For example, to accommodate an intolerant receiving network, one adjusts the relay threshold upward. This reduces the probability of an under-run, though at the expense of increasing the data-relay latency. To accommodate a tolerant network, one adjusts the relay threshold downwards. This reduces the data-relay latency, but at the cost of increasing the likelihood of an under-run. Applicant's adjustable under-run tolerance allows one to trade under-run for latency and vice versa. This permits one to accommodate a broad spectrum of networks that include tolerant networks, intolerant networks, and all receiving networks in between.

In contrast, *Kalkunte* accommodates only intolerant networks. In particular, *Kalkunte* discloses avoiding under-run. Nowhere does *Kalkunte* suggests that one might want to *allow*, rather than avoid, under-run. In this regard, *Kalkunte* sets a transmit relay threshold (XMTSP) equal to a minimum threshold X_m that "represents the minimum number of bytes that need to be stored in the FIFO buffer 32 in order to avoid transmit underflow (col. 4, lines 54 to 56)." *Kalkunte* then "determines whether the transmit start point [i.e., the transmit threshold (XMTSP)] for the specific packet should be set at the minimum threshold value (X_m) or whether the transmit start point should be adjusted [above the minimum threshold value (X_m)] in view of

differences between the arrival rate and removal rate from the transmit FIFO buffer 32 (col. 4, lines 36 to 44)."

In particular, "the transmit threshold XMTSP is adjusted to ensure that underflow does not occur during transmission of the packet (col. 5, lines 62 to 65)" by adjusting the threshold XMTSP *above* (and never *below*) the minimum threshold X_m. Moreover, Step 74 of FIG. 2 and accompanying text in col. 6, lines 9-13, discloses that "the calculated differential buffer capacity (Δm) is then *added* to the minimum threshold X_m in step 74 in order to obtain the adaptive transmit start point for the case where the removal rate is greater than the calculated arrival rate for the current data packet being received." Clearly, *Kalkunte* adjusts the relay threshold XMTSP to be higher than the minimum threshold X_m to avoid under-run. Nowhere does *Kalkunte* disclose or suggest adjusting the relay threshold below the minimum threshold X_m to allow a selected amount of underflow to occur during relay of a packet.

At col. 6, lines 53 to 58, *Kalkunte* discloses avoiding underflow by calculating different relay thresholds (XMTSP) for individual packets depending on the lengths of the packets. Notably absent from this passage, which is reproduced below for reference, is any discussion of actually *allowing* underflow, rather than *avoiding* it:

> According to the present invention, the transmit start point is calculated for each received packet. Thus, since packets can have variable length, the present invention provides an optimal start point for each packet in order to minimize transmit underflow and reducing the latency of the interface 10.

Clearly, *Kalkunte*'s only teaches adjusting the relay threshold to *avoid* under-run. Nowhere does *Kalkunte* teach adjusting the relay threshold in the opposite direction to *allow* a selected amount of under-run.

Claims 15, 23, and 24 include similar limitations to claim 1 and are patentable for at least the same reasons as claim 1. *Dixon*, *Haumont*, and *Kuo* fail to disclose or to suggest anything that would remedy the foregoing deficiencies in the teachings of *Kalkunte*, particularly with respect to adjusting a relay threshold from a first value that minimizes a probability of under-run to a second value that allows a selected amount of under-run to occur during relay of a message.

The dependent claims are also believed to be patentable for at least the same reasons as the claims on which they depend. Each dependent claim partakes of the novelty of its corresponding independent claim and, as such, has not been discussed specifically herein.

That the Applicant has declined to address certain comments of the Examiner does not mean that the Applicant agrees with those comments. Moreover, that the Applicant has asserted certain grounds for the patentability of a claim does not negate the existence of other grounds for patentability of that claim or other claims. Applicant amends the claims only to expedite prosecution of this application. Accordingly, these amendments are not meant to be an admission of unpatentablility of the originally filed claims.

Enclosed is a Petition to Withdraw Holding of Abandonment of Application. While no fees are believed to be due at this time, please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 10559-367001.

Respectfully submitted,

Date: June 27, 2006

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